College of Business

Spring 2026

MIS 152: Cloud and AI Infrastructure

Course Schedule: Tuesday and Thursday– 12:00pm-1:15 pm, Academic Resource Center 1013

Disclaimer: This syllabus and the schedule of readings, assignments, and activities may be changed by the instructor in order to maximize student learning needs and meet the objectives of the courses.

I. Instructor Information

Instructor	Evren Eryilmaz
Office	TAH 2094
Office Hours	Tuesdays and Thursdays 1:30-3:00 pm, and by appointment
Office Phone	916-278-3889
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E*mail access is essential in communicating with the instructor and your peers. Please activate your CSUS e-mail account and log on to the SacCT course regularly.*

This course is offered in a traditional learning format.

Optional Text:
Title: Learning Amazon Web Services (AWS): A Hands-On Guide to the Fundamentals of AWS Cloud
Author: Mark Wilkins
Publisher: Addison-Wesley Professional; 1st edition (July 19, 2019)
ISBN-13: 978-0135298343
ISBN-10: 0135298342

Optional Text:
Title: Cloud Native AI and Machine Learning on AWS: Use SageMaker for building ML models, automate MLOps, and take advantage of numerous AWS AI services
Author: Premkumar Rangarajan
Publisher: BPB Publications (February 14, 2023)
ISBN-13: 978-9355513267
ISBN-10: 9355513267

Course Description: Artificial intelligence (AI) is rapidly transforming data driven business decision making. Successful deployment of powerful AI models underscore scalable and robust infrastructures. This course explores cloud platforms such as Amazon Web Services, Azure, and Google Cloud. Students will learn the infrastructure requirements for powerful AI models in the cloud, the use of cloud platforms to build/train/deploy powerful AI models, and security/governance best practices for cloud-based AI models. Additionally, students will build/train/deploy cloud-based

AI models to solve business problems.

Course Learning Goals and Objectives:

Upon successful completion of this course, students will be able to:

1. Develop managerial understanding of infrastructure requirements for AI model workloads
2. Understand security best practices for cloud-based AI models
3. Understand governance best practices for cloud-based AI models
4. Apply cloud-based AI models to solve business problems
5. Synthesize and articulate ideas clearly and convincingly in oral and written forms

Program Learning Goals	**Student Learning Outcomes**	**Assessment Strategy**	**Direct Assessment Measure**
4.1	Develop managerial understanding of infrastructure requirements for AI model workloads, understand security best practices for **cloud-based AI models,** understand governance best practices for **cloud-based AI models, apply cloud-based AI models to solve business problems**	In-class exercises, Assignments, Quizzes, Final Exam	Scoring guide
1.1	Synthesize and articulate ideas clearly and convincingly in oral and written forms	Assignments, Quizzes	Scoring guide

Grading

More details about assignments and evaluation criteria will be posted on Canvas.

Assignment	Percentage
Homeworks	40%
In-Class Quizzes	30%
Final Exam	30%
Total	**100**

Final course grades will be awarded based on the following scale:

Percentage	Grade
94% to 100%	A
91% to 93%	A-
89% to 90%	B+
84% to 88%	B
81% to 83%	B-
79% to 80%	C+
74% to 78%	C
70% to 73%	C-
60% to 69%	D
0% to 59%	F

The instructor reserves the right to modify the course grading scheme. Final grade can be changed only if a posting error has occurred per University policy.

COURSE OVERVIEW AND POLICIES:

Use of Course Materials and Recording Policy: All instructional materials, including those posted to the course website on Canvas (e.g., recorded lectures, slides, assignments, activities, etc.), are intended for use by students enrolled in the course and remain the intellectual property of the university, publisher, instructor, or other entity. Course materials may not be posted to external websites (including, but not limited to, Course Hero, Chegg, etc.) or shared with students not enrolled in the course. Video or audio recording of lectures and other classroom instructions is prohibited without the prior permission from the instructor.

In this class, people of all ethnicities, genders and gender identities, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences. If you feel your differences may in some way isolate you

from our classroom community or if you have a specific need, please contact me early in the semester so that we can work together to help you become an active and engaged member of our class and community.

Academic Misconduct

Cheating. At Sacramento State, cheating is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means. Cheating at Sacramento State includes but is not limited to:

- Submitting the output of a GenAI tool as student intellectual property
- Copying, in part or in whole, from another's test or other evaluation instrument.
- Using crib notes, "cheat sheets," or any other device, including electronic devices not permitted by the instructor as an aid in writing an examination.
- Submitting work previously graded in another course unless doing so has been approved by the course instructor or by department policy.
- Submitting work simultaneously presented in more than one course, unless doing so has been approved by the respective course instructors or by the department policies of the respective departments.
- Altering or interfering with grading or grading instructions.
- Sitting for an examination by a surrogate, or as a surrogate.
- Any other act committed by a student in the course of his or her academic work that defrauds or misrepresents, including aiding or abetting in any of the actions defined above.

Plagiarism

Plagiarism, as a form of cheating, is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person's contribution. Regardless of the means of appropriation, incorporation of another's work into one's own requires adequate identification and acknowledgement. Plagiarism is doubly unethical because it deprives the author of rightful credit and gives credit to someone who has not earned it. Acknowledgement is not necessary when the material used is common knowledge. Plagiarism at Sacramento State includes but is not limited to:

- The act of incorporating into one's own work the ideas, words, sentences, paragraphs, or parts thereof, or the specific substance of another's work without giving appropriate credit thereby representing the product as entirely one's own. Examples include not only word-for-word copying, but also the "mosaic" (i.e., interspersing a few of one's own words while, in essence, copying another's work), the paraphrase (i.e., rewriting another's work while still using the other's fundamental idea or theory); fabrication (i.e., inventing or counterfeiting sources), ghost-writing (i.e., submitting another's work as one's own) and failure to include quotation marks on material that is otherwise acknowledged; and

- Representing as one's own another's artistic or scholarly works such as musical compositions, computer programs, photographs, paintings, drawing, sculptures, or similar works. CHEATING WILL NOT BE TOLERATED IN THIS COURSE. All students are expected to abide by the Academic Honesty Policy. Students may refer to the following link for full details of the Academic

Honesty Policy *http://www.csus.edu/umanual/student/stu-0100.htm*. All matters regarding academic integrity will be referred to the Student Conduct Officer in Student Affairs.

Generative AI Tool Usage Policy

The purpose of the homeworks/exams in this class is to enhance your critical thinking/explanation skills. Accordingly, you may not use generative AI tools on assignments/exams in this course. If you choose to use generative AI tools in violation of this policy (or in another class that permits them), please remember that they are typically trained on limited datasets that may be out of date. Additionally, generative AI datasets are trained on pre-existing material, including copyrighted material; therefore, relying on a generative AI tool may result in plagiarism or copyright violations. Finally, keep in mind that the goal of generative AI tools is to produce content that seems to have been produced by a human, not to produce accurate or reliable content; therefore, relying on a generative AI tool may result in your submission of inaccurate content. It is your responsibility—not the tool's—to assure the quality, integrity, and accuracy of work you submit in any college course.

Late Work Policy

All assignments (both individual and group work) are expected to be turned in by the due date listed in the syllabus. Late work will be penalized 50% for each day it is late. Note: the instructor may adjust due dates, but students will be given ample notice in class and via Canvas or email.

Incomplete: An incomplete grade (I) will only be issued in accordance to College of Business Administration policy. Among the conditions imposed by the instructor that must be met are: (1) a current passing grade (70 percent or better), (2) the successful completion of all prior assignments and exams, and (3) an unforeseen and unusual event beyond your control which prevents you from completing the semester, and can be documented and verified (employment-related events do not qualify). (4) An incomplete will only be considered after it has been determined that a withdrawal (W) cannot be issued. If you do not meet (1) through (4), you do not qualify for an incomplete. As stipulated by the University, an incomplete cannot be assigned when it is necessary for the student to attend additional class meetings to complete the course requirements.

Unauthorized Withdrawal (WU) indicates that a student did not officially withdraw from the course but failed to complete it. Among the conditions imposed by the instructor that must be met are: (1) a passing grade (70 percent or better) at the time that the student stopped attending classes, (2) attendance stopped before the 11th week of the semester. If you do not meet (1) and (2), you do not qualify for an unauthorized withdrawal (WU) grade and as a result you will be assigned a failing (F) grade.

Laptop and cell phone regulation: No photographing, recording or text messaging is allowed without permission of the instructor.

A disruptive student is a student who engages in classroom behavior that interferes with the process of teaching and learning. If a student is disruptive to my class, I will follow the Procedures for dealing with incidents of disruptive behavior described in the DEALING WITH INCIDENTS OF DISRUPTIVE STUDENT BEHAVIOR IN THE CLASSROOM document http://www.csus.edu/umanual/student/STU-0112.htm

TENTATIVE SCHEDULE (Subject to Change)

Homework/Quiz Dates: Please check canvas for details.

Date	Topic
Week 1	Course Introduction, Accessing to Cloud Platform, Software Installation
Week 2	Course Introduction, Accessing to Cloud Platform, Software Installation Practice: Scraping Data from Pinterest
Week 3	Theory: Cloud Concepts Overview Practice: Scraping Data from Pinterest
Week 4	Theory: Cloud Concepts Overview Practice: Using SageMaker to Analyze Pinterest Image Data
Week 5	Theory: Cloud Economics Billing Practice: Using SageMaker to Analyze Pinterest Image Data
Week 6	Theory: Cloud Economics Billing Practice: Video Analytics in SageMaker
Week 7	Theory: Cloud Global Infrastructure Overview Practice: Video Analytics in SageMaker
Week 8	Theory: Cloud Global Infrastructure Overview Practice: Scraping Data from Yahoo News
Spring Break	
Week 9	Theory: Cloud Security Practice: Scraping Data from Yahoo News
Week 10	Theory: Cloud Security Practice: Using SageMaker to Analyze Textual Data
Week 11	Theory: Networking and Content Delivery Practice: Using SageMaker to Analyze Textual Data
Week 12	Theory: Networking and Content Delivery Practice: Scraping Data from Spotify and Lyrics Genius
	Theory: Networking and Content Delivery

	Practice: Scraping Data from Spotify and Lyrics Genius
Week 13	Theory: Networking and Content Delivery Practice: Using SageMaker to Perform Music Analytics
	Theory: Networking and Content Delivery Practice: Using SageMaker to Perform Music Analytics
Week 14	Theory: Networking and Content Delivery Practice: Scraping Data from Youtube
	Theory: Compute Services for AI models Practice: Scraping Data from Youtube
Week 15	Theory: Compute Services for AI models Practice: Using SageMaker to Analyze Youtube Data
	Theory: Compute Services for AI models Practice: Using SageMaker to Analyze Youtube Data Miscellaneous Topics on AWS Certified Cloud Practitioner Exam Final Exam Review